

Understanding Organizational Accidents

How Project Managers Can Minimize
Their Effects

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Gentile or Jew

O you who turn the wheel and look to windward,
Consider Phlebas, who was once handsome and tall as you.

t. s. elliot
the wasteland

References

- Managing the Risks of Organizational Accidents
 - James Reason, 1997
- Managing the Unexpected
 - Karl Weick & Kathleen Sutcliffe, 2001
- Normal Accidents
 - Charles Perrow, 1999
- Human Error
 - James Reason, 1990

Recipes for Disaster



What is an Organizational Accident?

NOAA N Prime Satellite 2003



What is an Organizational Accident?

American Airlines 191 Chicago 1979



What is an Organizational Accident?

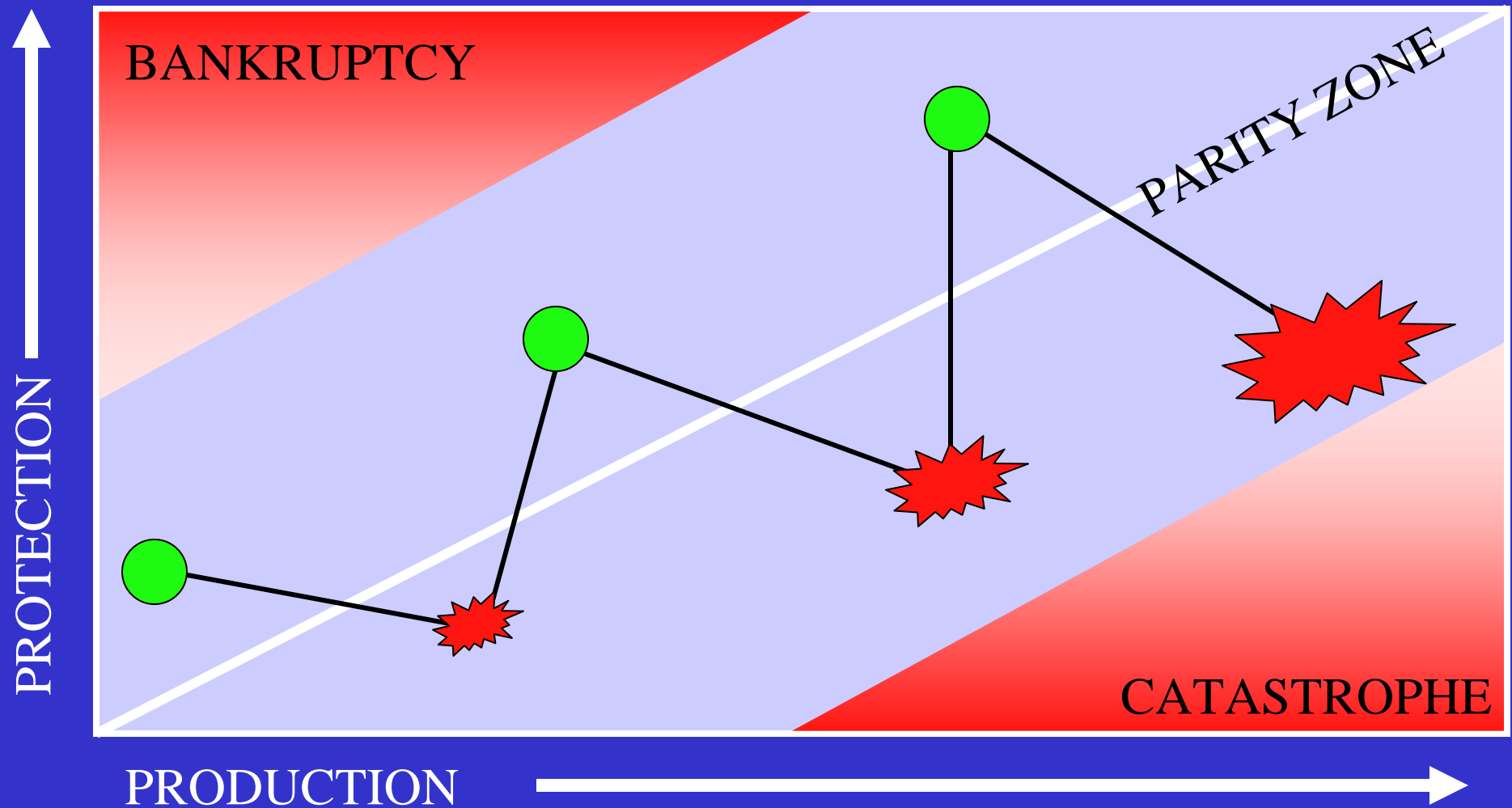
- Ariane 501 - 1996
- British Midland 92 - 1989
- Genesis Mission - 2004
- British Nuclear Power Mishap - 2005

etc, etc, etc

STAGES IN DEVELOPMENT AND INVESTIGATION OF ORGANIZATIONAL ACCIDENTS



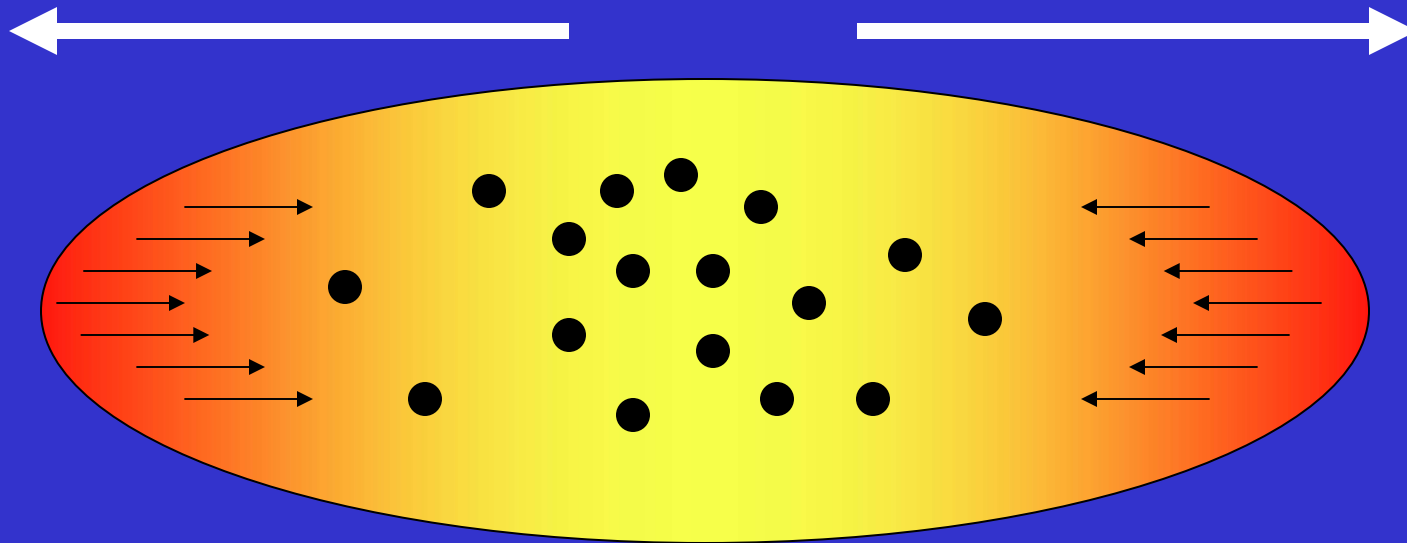
MOVING THROUGH THE PRODUCTION-PROTECTION SPACE



THE SAFETY SPACE

INCREASING RESISTANCE
TO HAZARDS

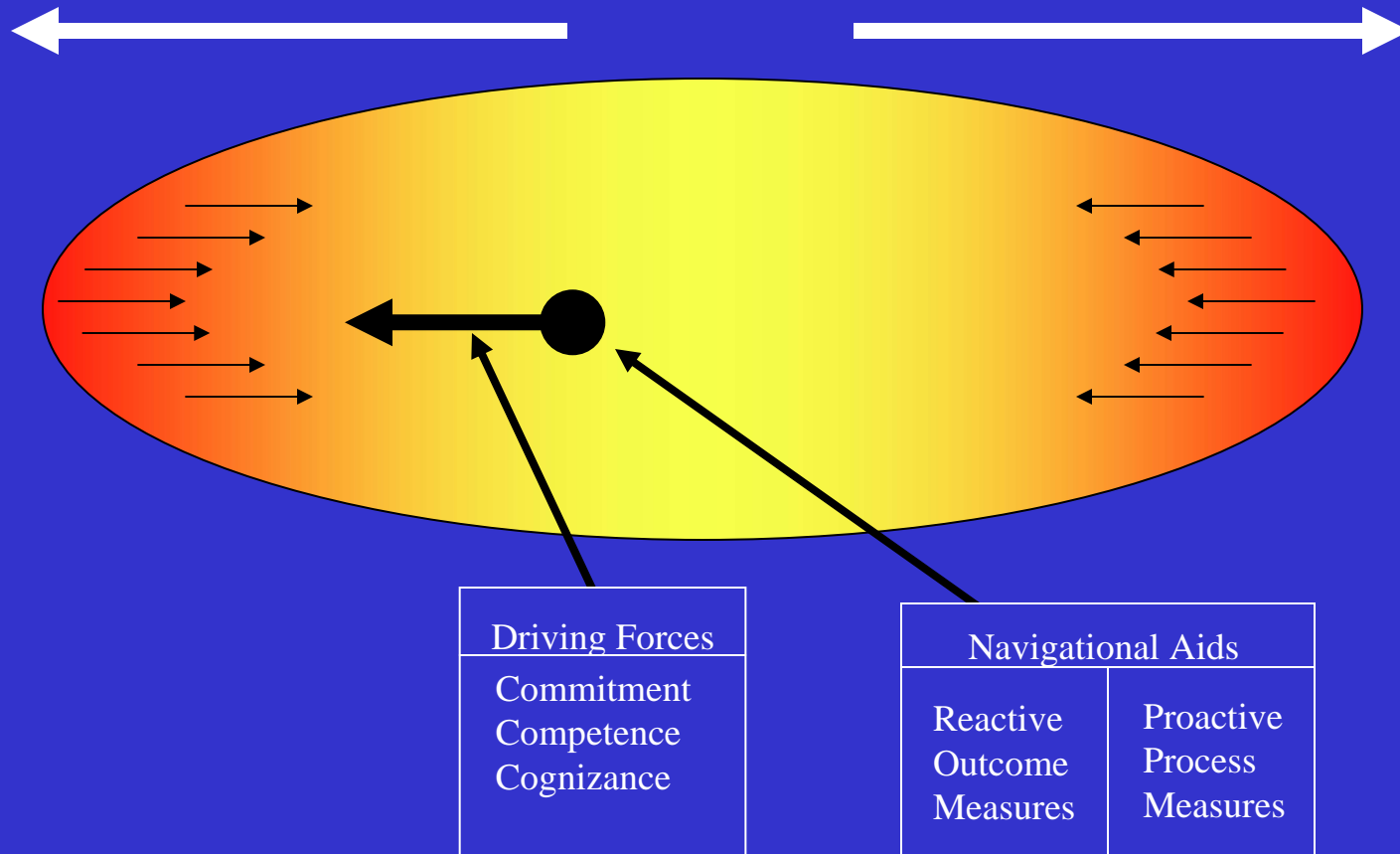
INCREASING VULNERABILITY
TO HAZARDS



THE SAFETY SPACE

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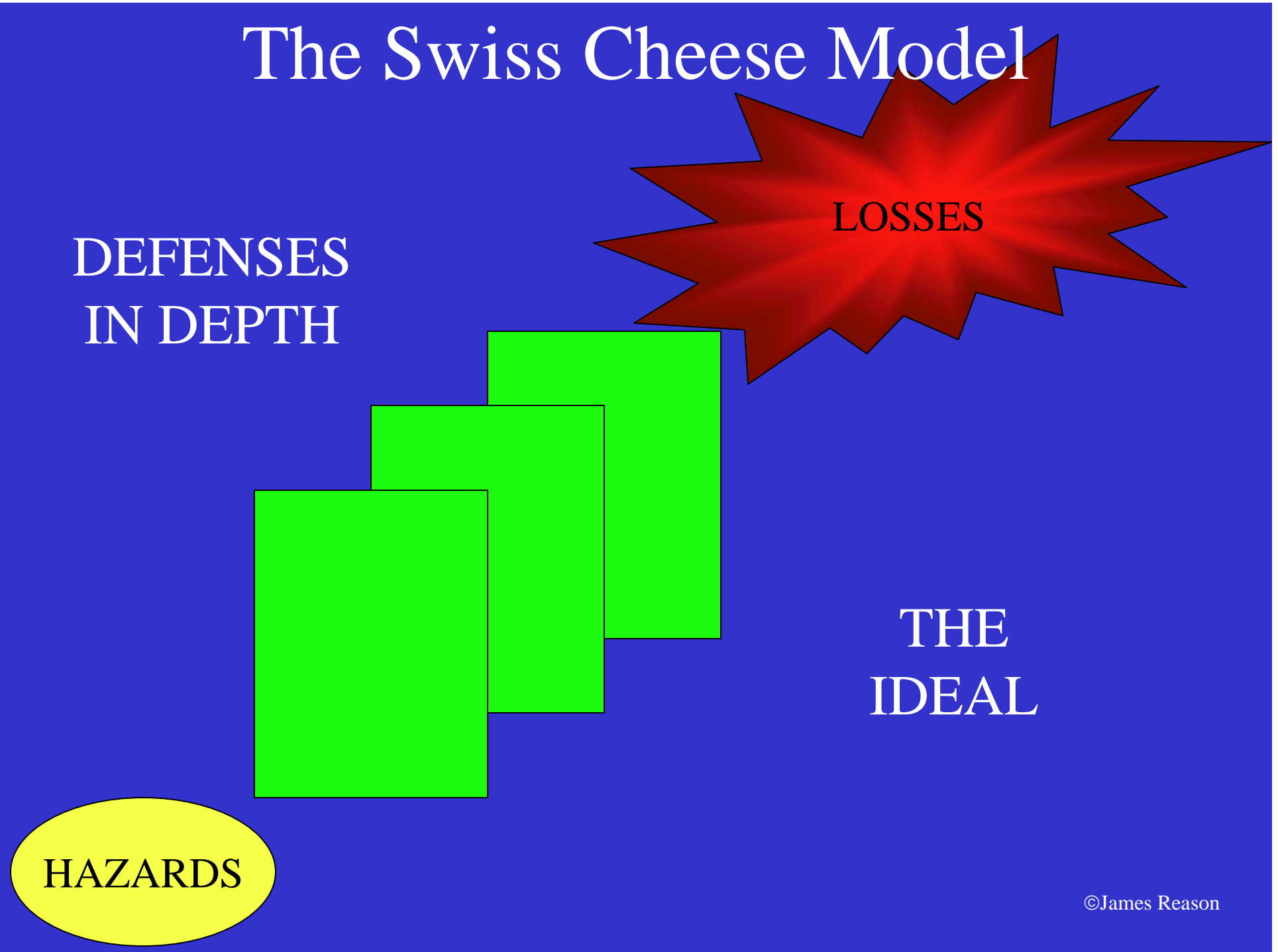
The Swiss Cheese Model

DEFENSES
IN DEPTH

LOSSES

THE
IDEAL

HAZARDS



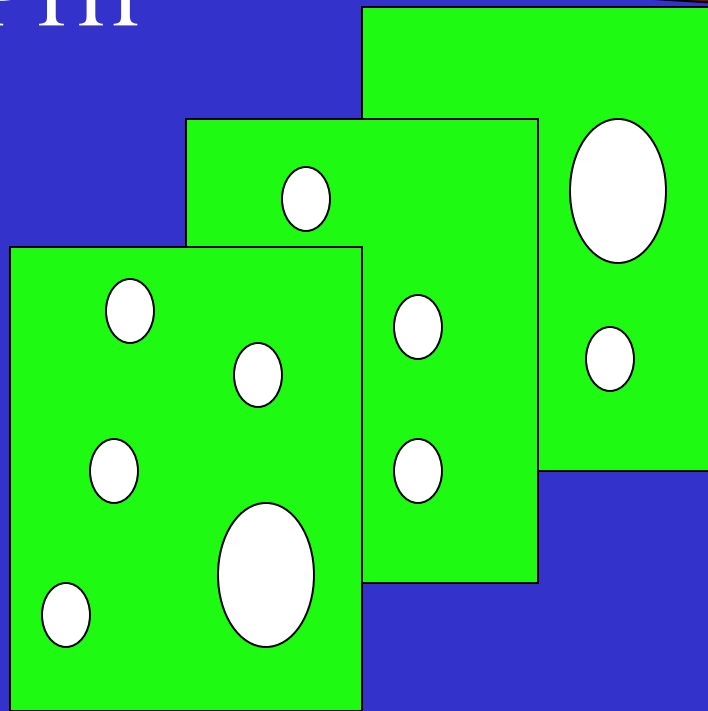
The Swiss Cheese Model

DEFENSES
IN DEPTH

LOSSES

THE
REALITY

HAZARDS



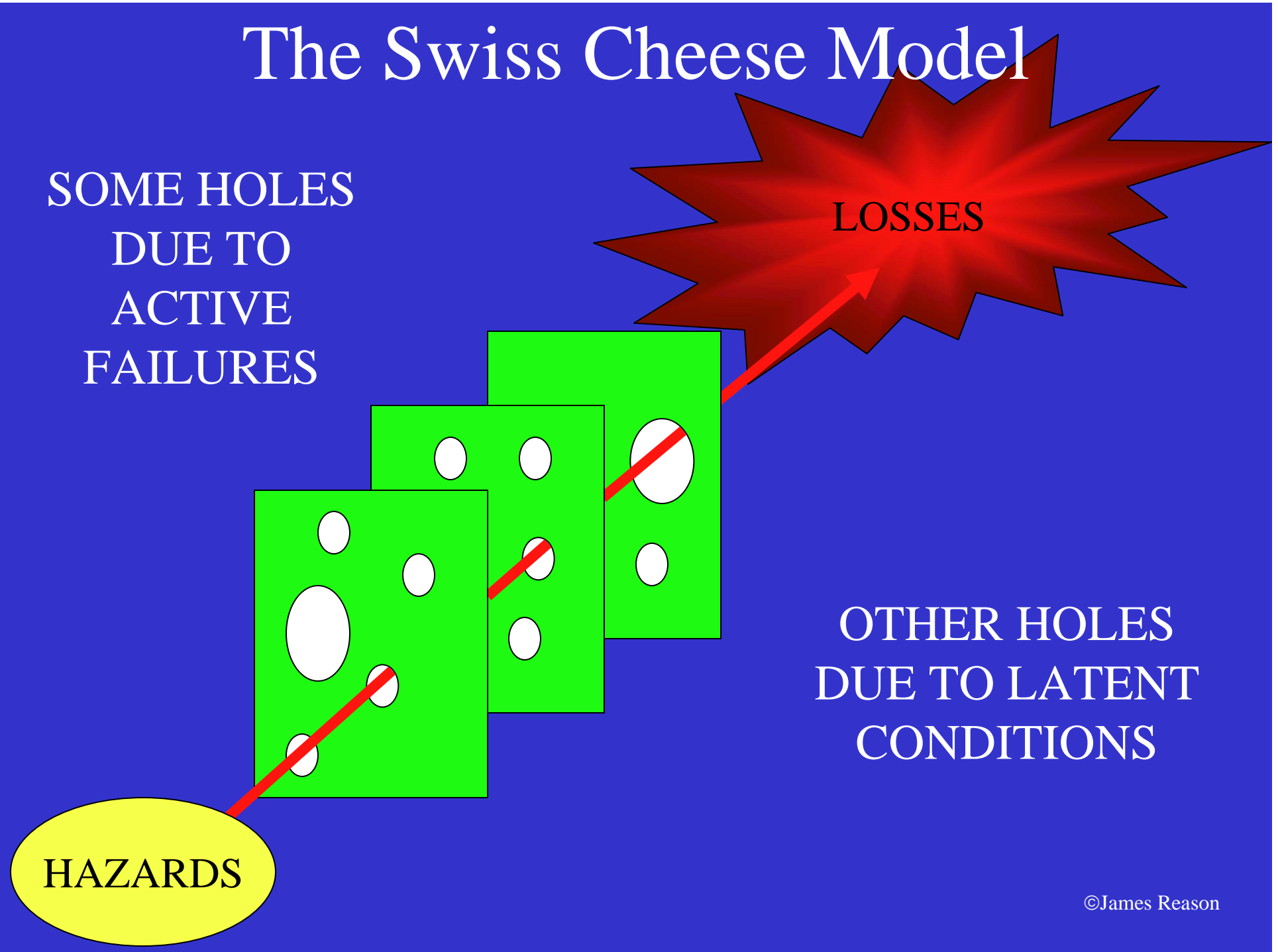
The Swiss Cheese Model

SOME HOLES
DUE TO
ACTIVE
FAILURES

LOSSES

OTHER HOLES
DUE TO LATENT
CONDITIONS

HAZARDS



Manage the Unexpected

- No one expects the Spanish Inquisition!
 - Monty Python Sketch
- The Measureless Peril
 - Winston Churchill

How HROs Manage the Unexpected

- Karl Weick

- Preoccupation with failure
- Reluctance to simplify interpretations
- Sensitivity to operations
- Commitment to resilience
- Deference to expertise

ENGINEERING A SAFETY CULTURE

- Karl Weick

4 CRITICAL COMPONENTS

- REPORTING CULTURE
- JUST CULTURE
- FLEXIBLE CULTURE
- LEARNING CULTURE

Questions to Determine if Your Organization has the Right Stuff

- Is there an “Organizational Safety” position, or just “Health and Safety” position?
- Are Safety jobs considered a good career move?
- Is there a department to collect & analyze organizational safety information, and how many levels from the President?
- Who decides disciplinary action? Is there a jury of peers or union representative? Is there an appeals process?
- Have you ever had an “*organizational audit*” performed by an error management professional?

Consider Phlebas

One's destination is never a place
but rather a new way of looking
at things.

- Henry Miller